



Drought Information Statement for MONTANA

Valid: July 20, 2024

Issued By: NWS Great Falls, NWS Missoula, NWS Glasgow, NWS Billings

Contact Information:

- This product will be updated, August 31, 2024 or sooner, if drought conditions change significantly.
 - Please see all currently available products at <https://drought.gov/drought-information-statements>.
 - Please visit <https://www.weather.gov/TFX/DroughtInformationStatement> for previous statements.
-
- D3 Drought conditions have developed.



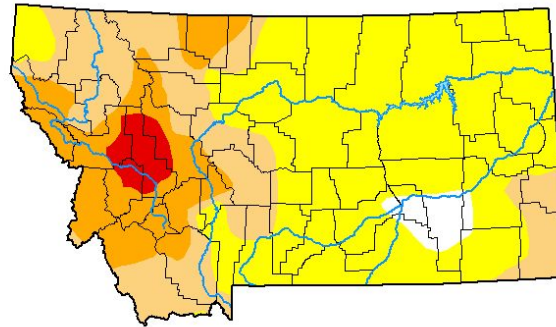


U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for Montana

- Drought intensity and Extent
 - **D4 (Exceptional Drought):** None occurring
 - **D3 (Extreme Drought):** Isolated area in western MT
 - **D2 (Severe Drought):** Portions of western, southwestern and north central MT
 - **D1 (Moderate Drought):** Portions of western, north central, central, southwestern and far southeastern MT
 - **D0: (Abnormally Dry):** The remainder of the state, with the exception of an isolated area in southeastern MT

U.S. Drought Monitor Montana



July 16, 2024
(Released Thursday, Jul. 18, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.75	97.25	41.24	17.59	2.71	0.00
Last Week 07-09-2024	2.75	97.25	40.03	3.45	0.00	0.00
3 Months Ago 04-16-2024	14.10	85.90	35.40	12.69	0.50	0.00
Start of Calendar Year 01-02-2024	39.20	60.80	21.30	2.68	0.00	0.00
Start of Water Year 09-26-2023	56.28	43.72	37.28	23.21	9.51	0.00
One Year Ago 07-18-2023	60.16	39.84	14.63	3.54	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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National Drought Mitigation Center



droughtmonitor.unl.edu

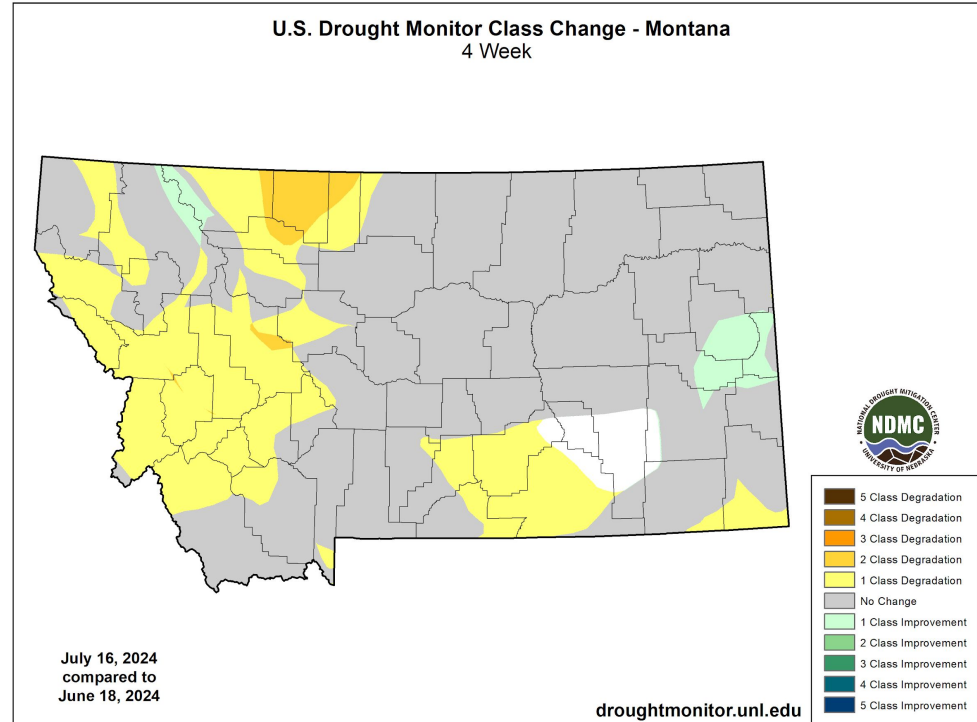


Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for Montana

- Four Week Drought Monitor Class Change

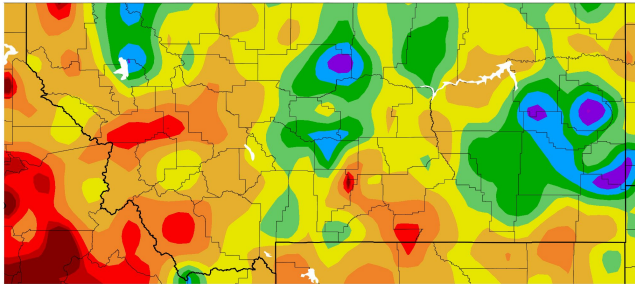
- Drought Worsened:** Across portions of western, north central, central, southwestern and southeastern MT, during the past four weeks.
- No Change:** No change in drought conditions, over the past month, were observed over most of central and eastern, MT.
- Drought Improved:** Isolated areas of improvement occurred over northwestern and far eastern, MT.





Precipitation

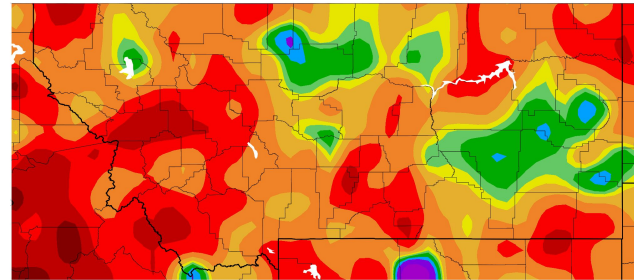
Precipitation (in)
6/20/2024 – 7/19/2024



Generated 7/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
6/20/2024 – 7/19/2024



Generated 7/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- **Precipitation (in):** During the past month, most of the state received 0.5” to 1.5” of precipitation, with some isolated areas receiving more than 2.0” of moisture. Some areas of the state received less than 0.5” of precipitation.
- **Percent of Normal Precipitation (%):** Most of the state received below normal precipitation, while some isolated areas received above normal precipitation amounts.

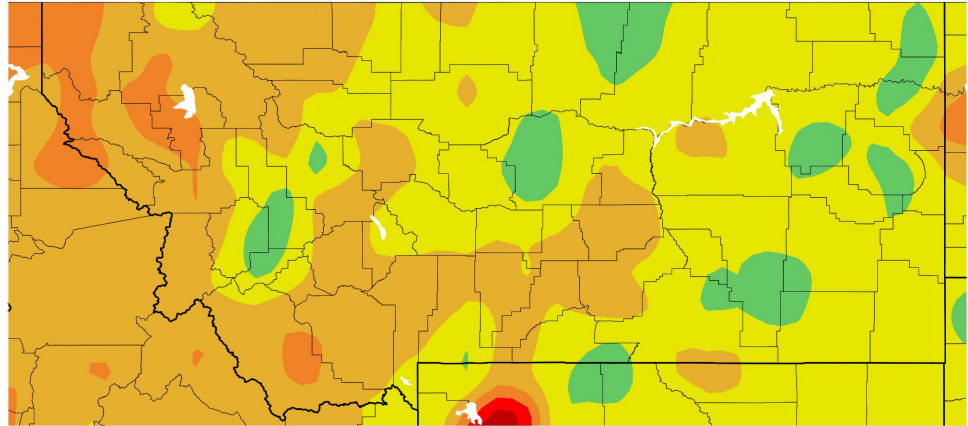




Temperature

Departure from Normal Temperature (F)
6/20/2024 – 7/19/2024

- Most of The Treasure State experienced warmer than normal temperatures. There are some isolated areas where temperatures were slightly cooler than normal.



Generated 7/20/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

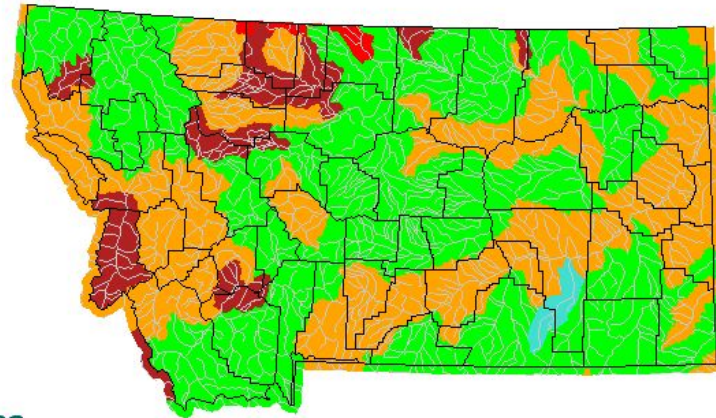




Hydrologic Conditions and Impacts

- **Above Normal:** One isolated area of The Lower Yellowstone Basin
- **Normal:** The average streamflow for much of MT, is at a level that is considered, “normal.”
- **Below Normal:** Nearly half of the state is experiencing, “below normal,” stream flow, with isolated areas of western, southwestern, northern and central MT in the, “much below normal,” range. Isolated areas of The Milk River Basin fall within the, “low,” average streamflow percentile class.

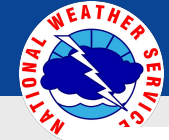
Friday, July 19, 2024



Explanation - Percentile classes							
	<10	10-24	25-75	76-90	>90		
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High	No Data

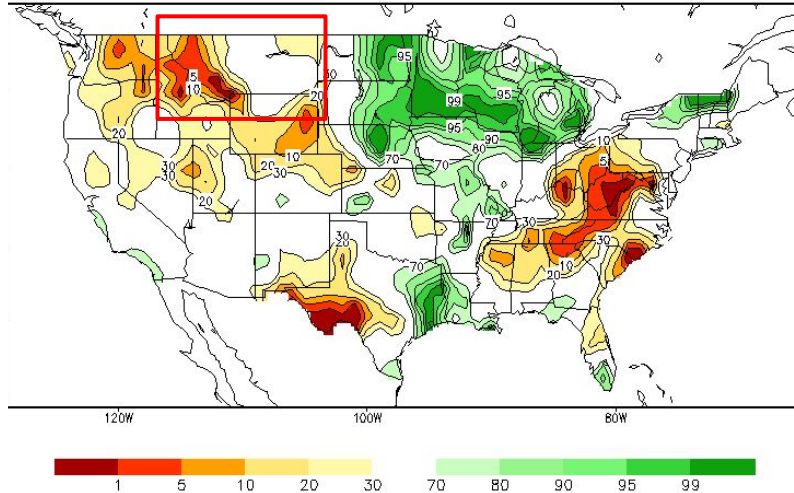
Image Caption: USGS 7-day Average Streamflow HUC Map, valid: July 19, 2024





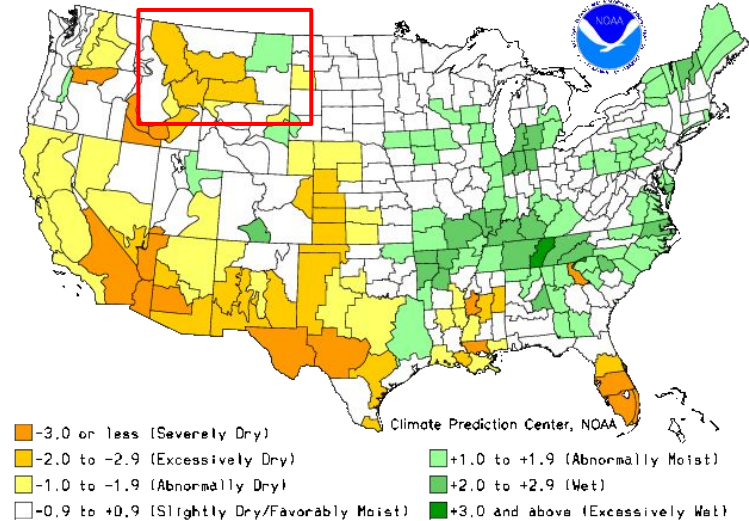
Agricultural Impacts

Calculated Soil Moisture Ranking Percentile
JUL 19, 2024



- The Soil Moisture Ranking Percentile resides in the low range across the western third of the state, as well as, portions of eastern, MT. The remainder of the state ranks in the 30 to 70 percentile range.

Crop Moisture Index by Division
Weekly Value for Period Ending JUL 13, 2024
Short Term Need vs. Available Water in a Shallow Soil Profile



- The Crop Moisture Index includes western, central and much of southern MT in an area identified as, “excessively dry,” while soil moisture values for north central and southeastern MT are considered, “slightly dry/favorably moist.” Northeastern MT is considered, “abnormally moist.”

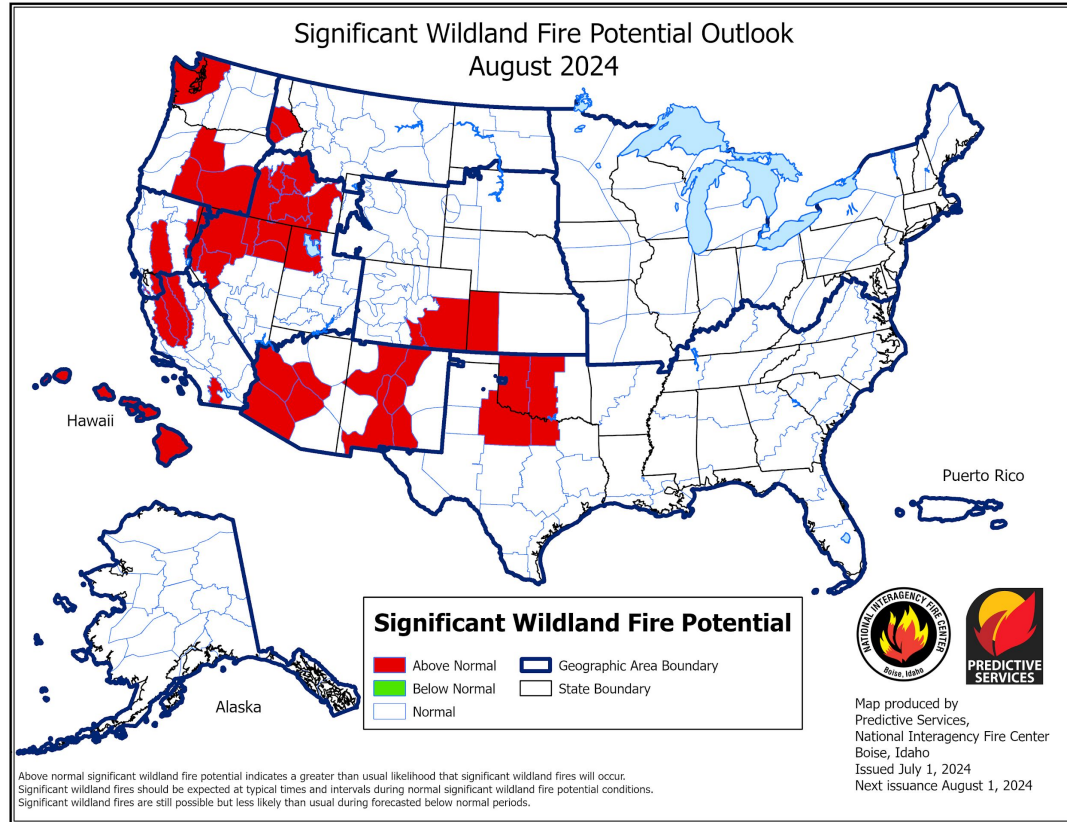




Fire Hazard Impacts

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

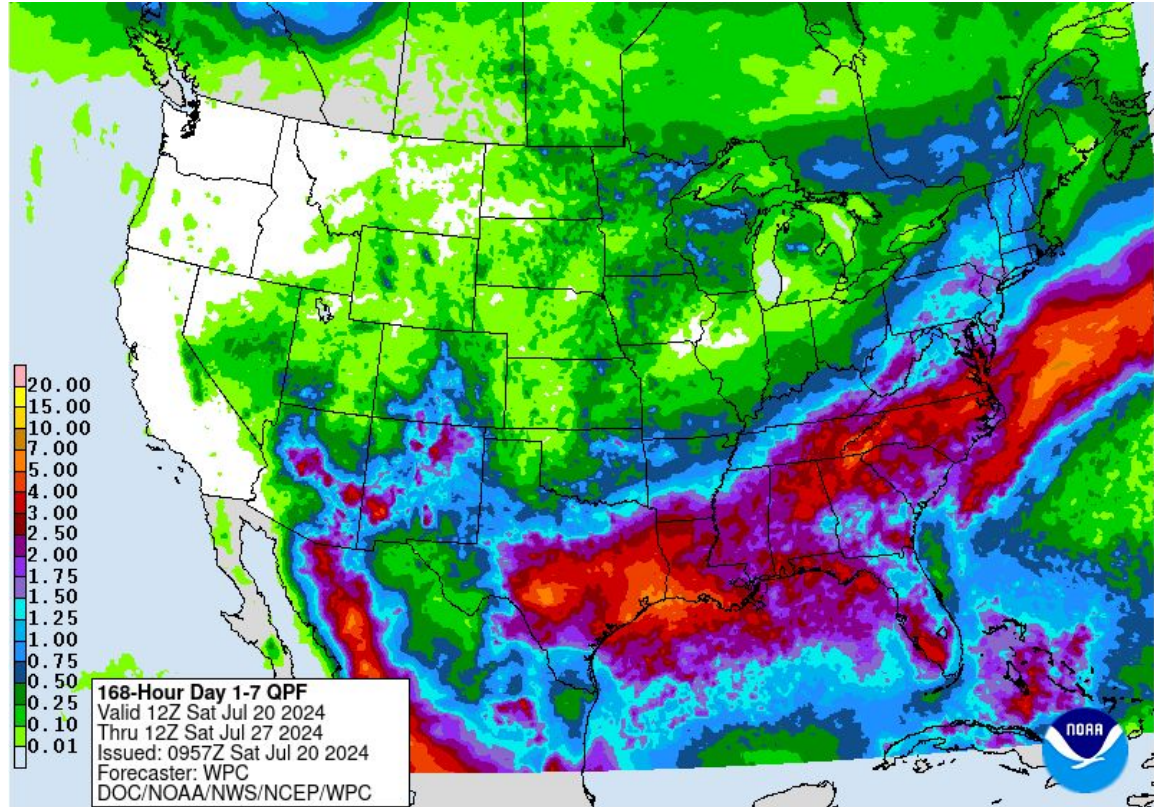
- Montana is included in an area of normal significant wildland fire potential conditions. Significant wildland fires should be expected at typical times and intervals.
- **Grasslands:** Fuels are, generally, trending drier.
- **Mountains:** Snow has melted out.





Seven Day Precipitation Forecast

- During the week of, July 20-27, 2024, much of western and north central MT is forecast to remain dry.
- Portions of central, southwestern and eastern MT are forecast to receive, generally, 0.10" or less, of liquid precipitation. A few isolated mountain peaks may receive up to 0.25", throughout the week.





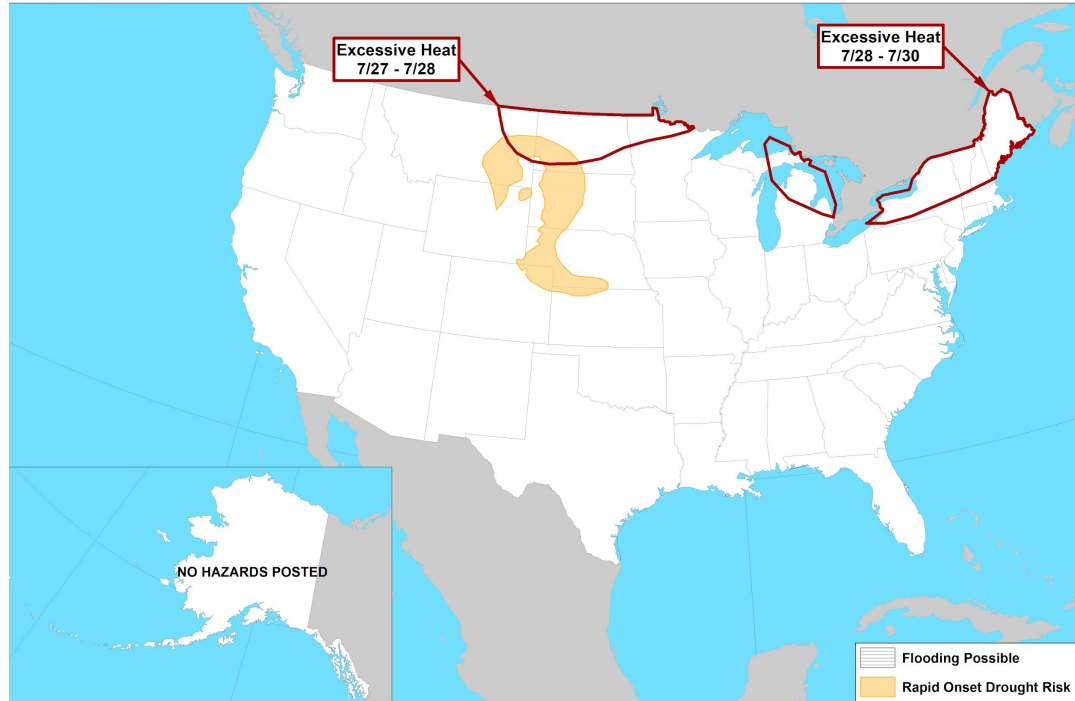
Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- For the outlook period of, July 27 through August 2, portions of eastern MT are included in an area of rapid onset drought risk.



Day 8-14 U.S. Hazards Outlook
Valid: 07/27/2024-08/02/2024



Climate Prediction Center
Made: 07/19/2024 3PM EDT

Follow us:
www.cpc.ncep.noaa.gov





Long Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Looking ahead to next month, there is a higher probability for The Treasure State to experience warmer than normal temperatures.

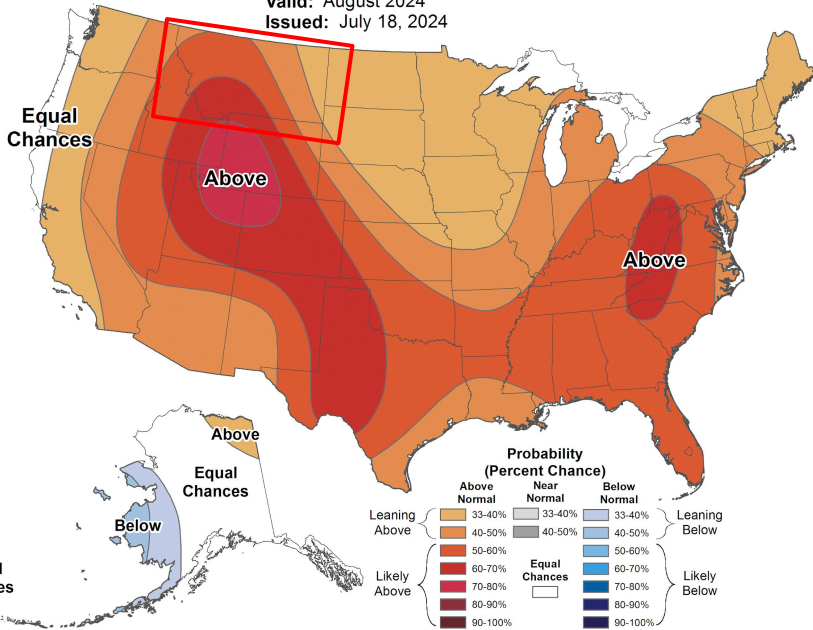
- Virtually statewide, the Precipitation Outlook shows a better chance for below normal precipitation.



Monthly Temperature Outlook



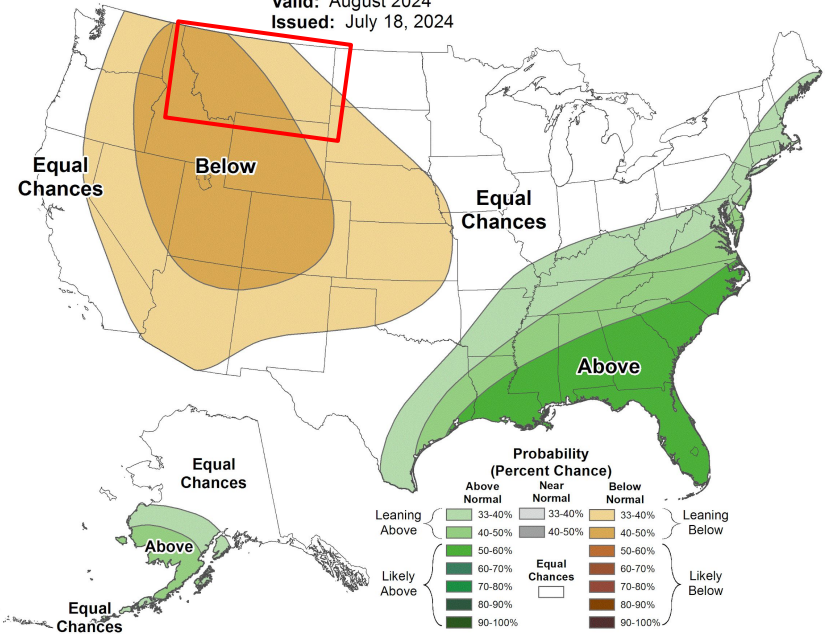
Valid: August 2024
Issued: July 18, 2024



Monthly Precipitation Outlook



Valid: August 2024
Issued: July 18, 2024





Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- More than 45% of the state of Montana is reported, “moderately dry,” with an additional, greater than 15% reported, “severely dry.” Montana State Library | National Drought Mitigation Center. 2024. Drought Impacts. [accessed July 20, 2024]. <https://storymaps.arcgis.com/stories/76204aa1271a4a7f8a775fc2bba9ef83>

Agricultural Impacts

- Impacts to crops and grasslands

Fire Hazard Impacts

- An extended period of anomalously hot temperatures with dry conditions, supports the curing of fuels.

Other Impacts

- Heavy downpours in association with thunderstorm activity can still cause flash flooding.
- Impacts to outdoor recreation and tourism

Mitigation Actions

- We continue to monitor potential drought and flooding impacts.
- Messaging concerns to the public is essential to public safety, and as such, remains a high priority.

